

Technology In the Piano Lab: Band-in-a-Box – An Interview with E.J. Choe

E.J. Choe

Rachel Nardo

E.J. Choe is Director of the Music Academy at Indiana University-Purdue University Indianapolis. This community-based music school annually serves more than 200 children aged 5- to 18 years in after-school music classes and private lessons.

Nardo: *Having been trained as a classical pianist, how did you become involved in the use of technology to teach piano?*

Choe: Like many piano teachers, all I ever wanted to do was to teach piano! I didn't expect to become a music technologist, but in this digital age my role as a piano teacher has expanded. Since coming to the Music Academy, instead of sitting at a grand piano in my private studio, I now teach in a piano lab with 16 Roland digital keyboards (HP201) equipped with flat screen and wireless keyboard computers loaded with educational software. In all my years of training, I never imagined teaching piano would involve this much digital technology. The opportunities for creativity and skill development are endless!

Nardo: *How does one get started using technology in a piano lab?*

Choe: One of the most important things about facilitating instruction in a piano lab is choosing the right instructional and creative software. Among the many music programs to choose from, it is necessary to find programs that are friendly, efficient, and productive for our students as well as easy for instructors to adopt. In addition to *Auralia*, *Essentials of Music Theory*, and

Finale, we incorporate PG Music's product *Band-in-a-Box* for composition, ear training, and improvisation. Band-in-a-Box is one of the students' favorites because it gives them

(INSERT GRAPHIC: BANDINABOX1)

freedom to create, even with little musical knowledge. It can also enhance musicianship, ear training, and composition skills while students work on their creativity, or even be a useful tool for teachers who are not comfortable accompanying their students. Depending on how BB is used, it can be a toy, a useful tutor, or a performance partner.

Nardo: *How do you use Band-in-a-Box in piano class for older elementary or secondary school children?*

Choe: To begin, I have students first spend time to explore, analyze and appreciate the interaction of musical elements such as melody, rhythm, tempo, timbre, texture, harmony, and style found in the software's different music samples, then I have them use it for improvising and composing. Students are usually intrigued right away by experimenting with the sounds of different instruments on a familiar piece. There are over two hundred classical pieces in the basic BB library, but the software also has many samples of popular, jazz, and rock genres—an advantage for working with younger students. I also use BB as supplemental material for Class Piano to improve musicianship, ear-training, and skills in composing, arranging, and improvising.

Nardo: *What kinds of assignments do you give the students --- what can they do with this program?*

Choe: First, it is important to understand that BB consists of several parts, of which students start by accessing the Main Window, Drum Kit Window, and Lead Sheet Window.

(INSERT GRAPHIC OF BANDINABOXMAINWINDOW)

Functions such as Switching Styles and Loop are used in many of the following areas. For example, I ask them to add an accompaniment to a piece by using Chord Sheet function. Even if a student does not have any idea of what chord should go with a melody, BB can always play back, which gives students an opportunity to hear what does and does not sound good—they learn by listening and exploring different possibilities. There are four ways of using the chord sheet by choosing the Display Options: Alphabet chords, Roman numerals, Solfeggio, and Nashville notation. Most students are most comfortable using the alphabet, for example, C, F, and G7.

Students can also be asked to choose their favorite accompaniment style and explain their choice of speed, rhythm, and characteristic pattern. The software allows them to experiment in moving from a major to a minor key, shifting meter, and also using different accompaniment patterns (e.g., ostinatos).

Nardo: *How do you use the software for ear-training? I thought it was for accompanying and composition.*

Choe: The software can be used in many ways—not just for composition, accompanying, and improvisation. Students can train their ear by listening to different song examples that employ different harmonic progressions (e.g., I—IV—V). They learn by repetition, of which advantage can be taken by selecting the LoopSec, which repeats segments over and over. There is also a dedicated ear-training component. By clicking the icon of an ear, you get the Ear Training Window. This helps students to improve their skills in hearing notes, chords, and intervals.

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Depending on their level, students can increase the level of difficulty by adding challenges: for example, “Guess chord and root.” If a mistake is made, the question is repeated until the correct answer is given.

Nardo: How does this program help them learn to compose?.

Choe: Band-in-a-Box has over two hundred samples of classical repertoire. First, students are encouraged to listen to, analyze, and try to emulate or create a composition based on a style of a certain composer or on a certain composition. In a sense, this is a musical sketchpad on which they have the opportunity to work on harmonic figures taken from these compositions with embellishments, variations, and even improvisations. The program allows them to play with sonic possibilities, even if they do not fully understand the complexities of music theory.

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By accessing the Notation Window, students can compose different variations on a melody using the same accompaniment harmonies. They can also explore different rhythms and even harmonies by shifting from major to minor. BB is able to play back the input of the variations. In addition, BB provides the ability to mute the melody, so students can try their improvisation skills on the same harmonic progression. The compositions can be transposed—a very helpful feature for singers and their accompanists, not to mention teachers. The ability to change tempo is also helpful for student who cannot play a piece up to speed. .

Nardo: *Thank you for taking time to talk about how you use this technology in your lab. It sounds this program sounds like it has endless possibilities. Is there anything you would like to add?*

Choe: Yes. It is a wonderful feature that Band-in-a-Box plays back everything—perhaps too easy a way out for piano students. It does, however, give students a chance to work on the creative side, and its efficiency enables students to can hear their efforts right away without having to struggle to play by themselves. If we must talk about a limitation in music experience with BB, the beats are accurate—too accurate! There is no rubato whatsoever in the melodic lines, which sounds unnatural, unemotional. Also, because of the electronic sound, we miss the beauty and subtlety of real instruments. Nevertheless, as mentioned before, BB has the ability to play anything students input. Usually in piano or musicianship textbooks, there are some ear training and composition assignments. By adding this computer software in the piano lab, students will experience much more than just playing the piano. They will have a great time working on the creative assignments by getting hands-on experience with Band-in-a-Box.

Note: Band-in-a-Box is available for both the PC and Mac. See <http://www.pgmusic.com/>